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To "Kathi J. Hooper" <khooper@libby.org>, Paul
Peronard/EPR/R8/USEPA/US@EPA, Bonita
Lavelle/EPR/R8/USEPA/US@EPA
cc "Hart, Julie" <JHart@mtech.edu>

bcc

Subject: Additional bark results

History:  This message has been replied to and forwarded.

Hi Paul, Bonnie, and Kathi,

As part of our collaboration with USFS in Libby, we collected and analyzed additional bark samples near the Alexander Test site and on the Rainey Divide Trail. Attached is a summary of the results we provided to USFS today. The next step for us is to conduct an occupational exposure study of USFS workers (actually a simulation of their activities) in the Alexander Test site area in May (wet conditions), with a comparison study in late August (hot, dusty conditions).

We will keep you updated on the progress of this study.

Please let me know if you have any questions.

Thanks,

Tony Ward
The University of Montana
Center for Environmental Health Sciences



(406) 243-4092 Supplemental Data R01 April 9 08.doc

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Evaluation of Current and Potential Occupational Exposures to Asbestos in Libby, Montana - Supplemental Data

Tony J. Ward, Ph.D., The University of Montana

February 10, 2008

The results of these additional tree bark samples support the need to carry out the sampling and occupational exposure studies proposed in Aims 1 and 2 of our R01 proposal. These data were not available when our proposal was originally submitted in February, 2008.

Additional tree bark samples were collected on US Forest Service (USFS) property, specifically at the USFS Alexander Test site (off of USFS Road 4872) and on the Rainy Divide Trail/Loop (Trail number 12S), on November 2, 2007. The results presented here are from an area frequented by the Libby public while hiking, hunting, etc. In addition, USFS employees conduct a significant amount of work in this area, while wearing little to no personal protective equipment (PPE).

Table 1: Tree bark sample results – USFS land northeast of the mine.

Sample ID	Location, Description	Type of Tree	Amphibole fiber/cm²
Sample 1	Alexander Test Site.	Larch	36,898
Sample 2	Alexander Test Site.	Larch	158,583
Sample 3	Alexander Test Site.	Larch	112,336
Sample 4	Rainy Divide Trail 12S (up the ridge from USFS Road 4872).	Ponderosa pine	568,137
Sample 5	Rainy Divide Trail 12S (up the ridge from USFS Road 4872).	Douglas Fir.	12,356,979
Sample 6	Rainy Divide Trail 12S (up the ridge from USFS Road 4872). Mine site is visible from this location, looking directly down the ridge, approx. 1 mile away.	Douglas Fir	15,383,941
Sample 7	Rainy Divide Trail 12S (up the ridge from USFS Road 4872). This sample was collected several yards to the east of the trail.	Douglas Fir	13,377,926
Blank (Control)	Bark sample collected in Missoula, MT.	Ponderosa pine	None detected

These data show that areas previously thought to be not contaminated are indeed contaminated with asbestos fibers, which were likely dispersed in areas downwind of the Libby mine throughout the 70 years of operation. These data also support our hypothesis that asbestos exposures are still occurring to USFS employees that conduct work in this area, and to the general public that use this area for recreational purposes.